

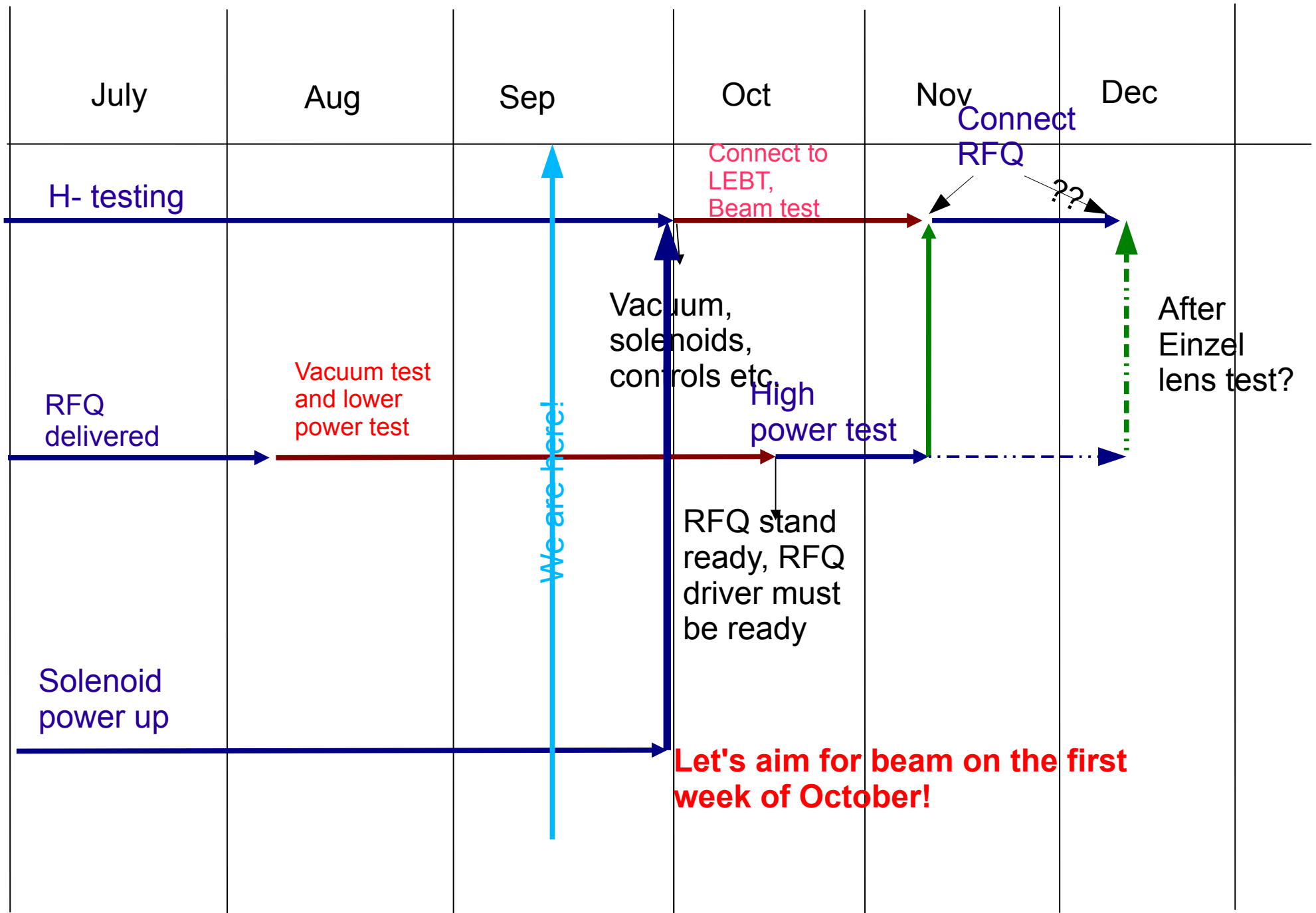
Pre-injector Upgrade Updates (17 Aug 2011 – 14 Sep 2011)

C.Y. Tan
14 Sep 2011

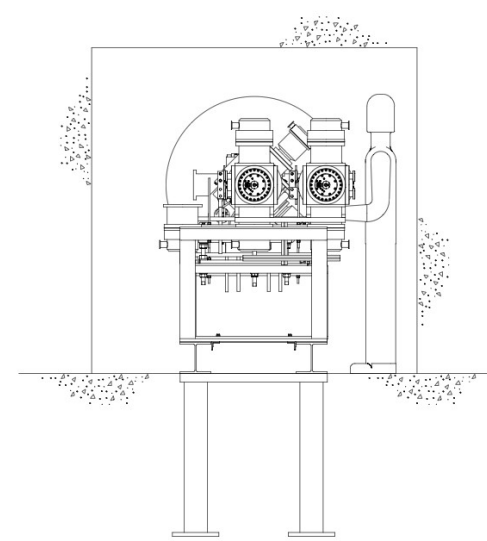
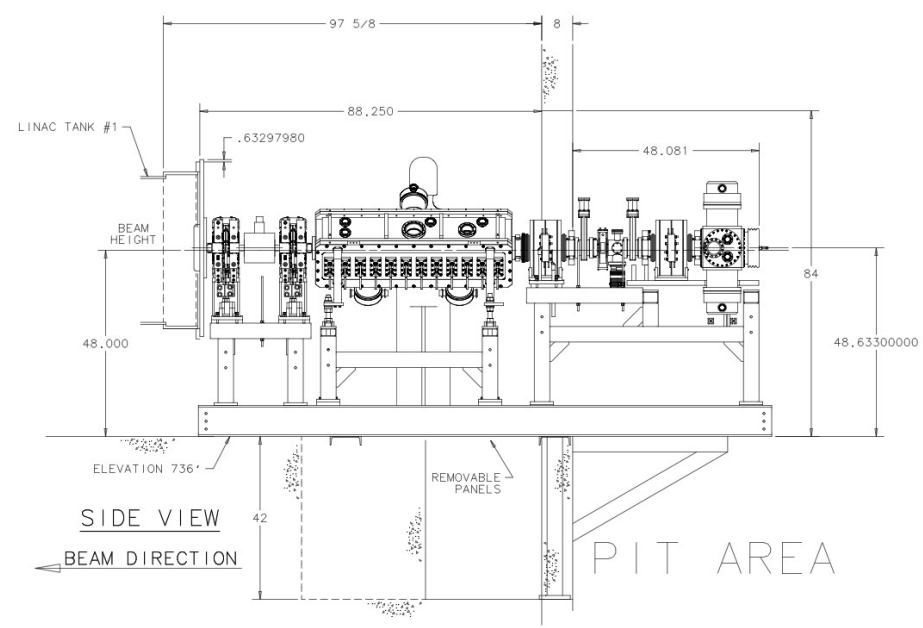
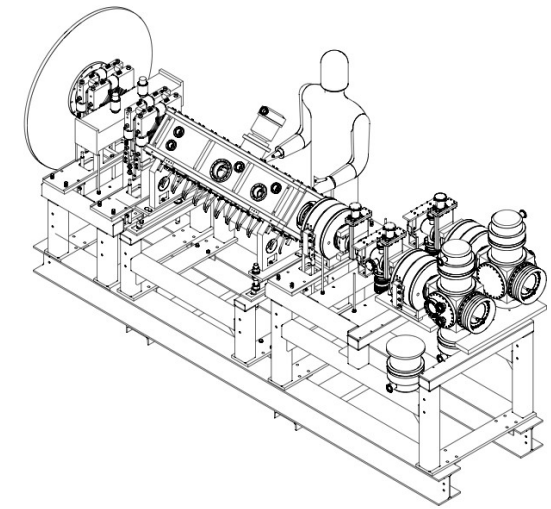
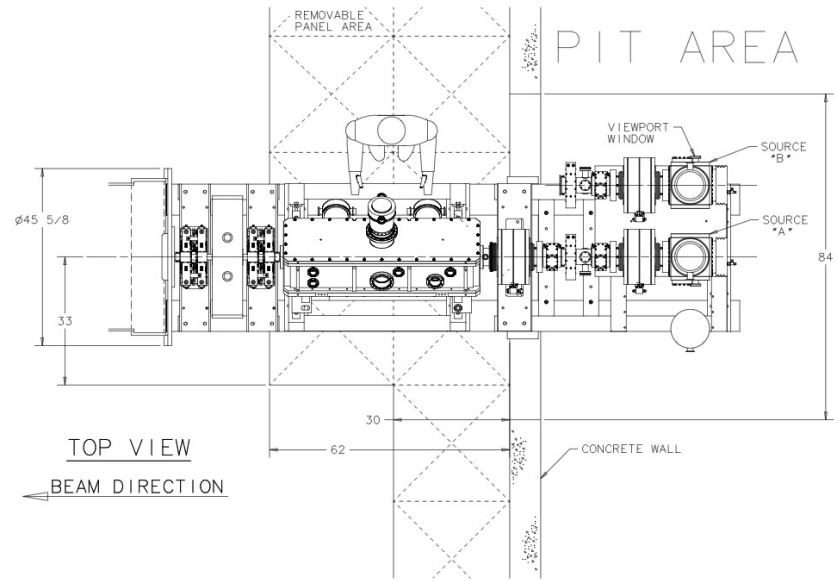
Review (01 Sep 2011)

- 8:30 – 9:00 Executive Session (closed) 30'
- 09:00 – 09:20 Introduction and Overview 20' Speaker: William Pellico (FNAL)
- 09:20 – 09:50 Integration/Beam Matching(RFQ/Injector Design) Issues 30' Speaker: Cheng-Yang Tan (Fermilab)
- 09:50 – 10:10 Ion Source Design and Status 20' Speaker: Dan Bollinger (Tevatron Department)
- 10:10 - 10:40 Installation and Commissioning Plan 30' Speakers: Mary Convery (Fermilab) , William Pellico (FNAL)
- 10:40 – 11:00 Coffee
- 11:00 – 11:30 Instrumentation and Control Plan 30' Speakers: Vic Scarpine (Fermilab) , Elmie Peoples-Evans (Fermilab)
- 11:30 – 12:00 Issues, worries, and contingency plans 30' Speaker: Cheng-Yang Tan (Fermilab)
- 12:00 – 13:30 Lunch (Executive Session for Committee)
- 13:30 – 14:30 Questions and Answers 1h00'
- 14:30 – 16:00 Writing Session (closed) 1h30'
- 16:00 – 17:00 Closeout 1h00'

<http://beamdocs.fnal.gov/AD-public/DocDB/ShowDocument?docid=3941>



REV	DESCRIPTION	DRAWN		DATE	
		APPROVED		DATE	

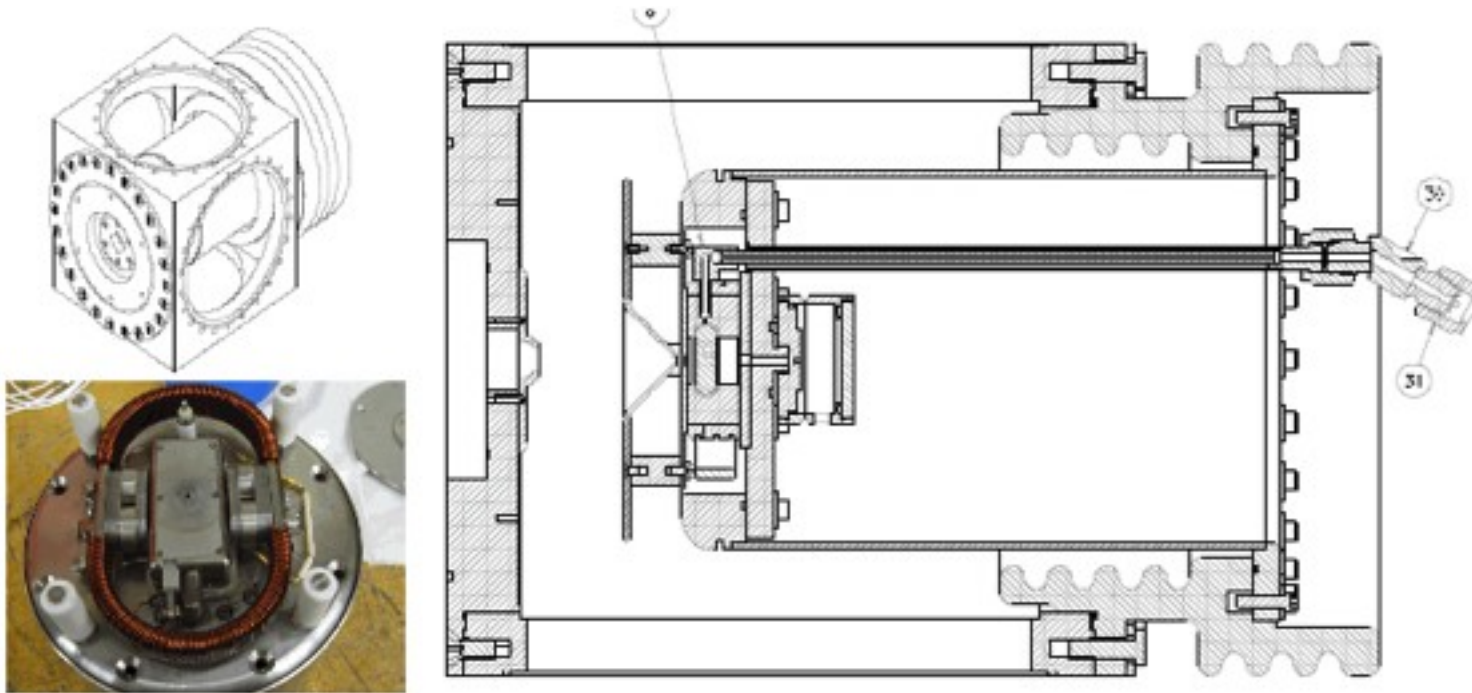


PREACCELERATOR PRELIMINARY LAYOUT

APRIL 27, 2011

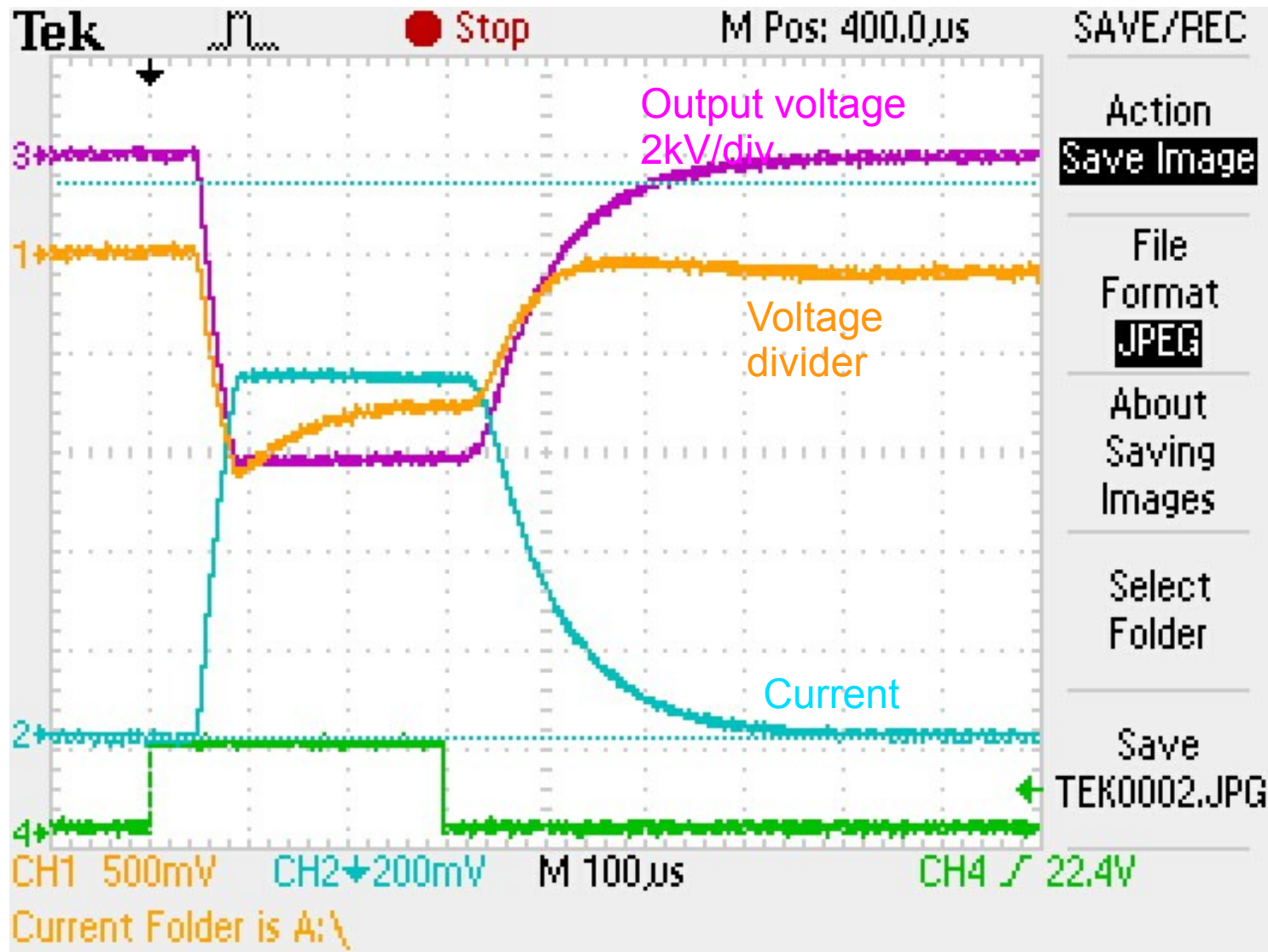
UNLESS OTHERWISE SPECIFIED			ORIGINATOR	
+	+	+	DRAWN	
+	+	+	CHECKED	
+	+	+	APPROVED	
1. BREAK ALL SHARP EDGES 2. DO NOT SCALE DRAWING 3. DIMENSIONS BASED UPON ASME Y14.5M-1994 4. MIN. ALL UNCH. SURFACES			USED ON	
5. DRAWING UNITS: U.S. INCH			MATERIAL	
FERMI NATIONAL ACCELERATOR LABORATORY UNITED STATES DEPARTMENT OF ENERGY				
SCALE	DRAWING NUMBER		SHEET	REV
CREATED WITH :			1 OF 1	
GROUP :				

Source Status



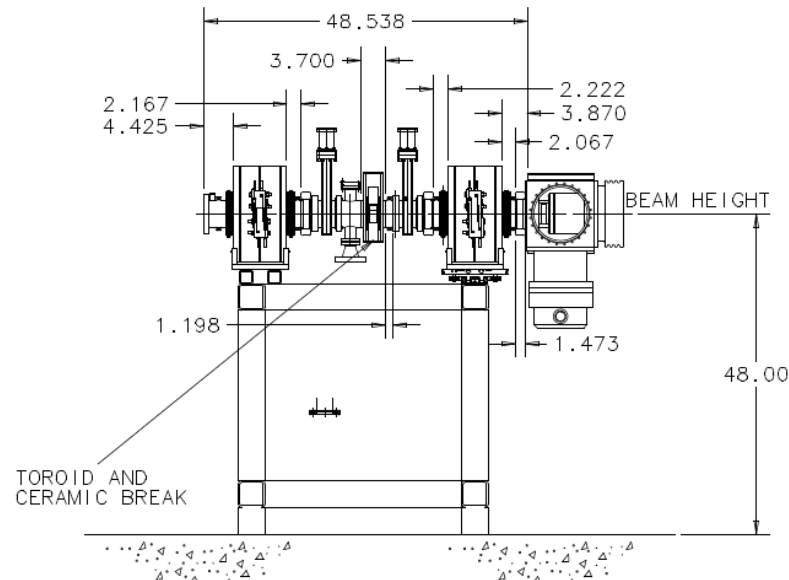
Device	Status	Comments
Modulator PS	To be installed	Need info on how to control
Valve pulser	being tested	
Arc modulator pulser	starting on it now	
extractor pulser	testing	

First results from new extractor pulser



Small problem with voltage divider.

LEBT Status



Klixons on solenoids!

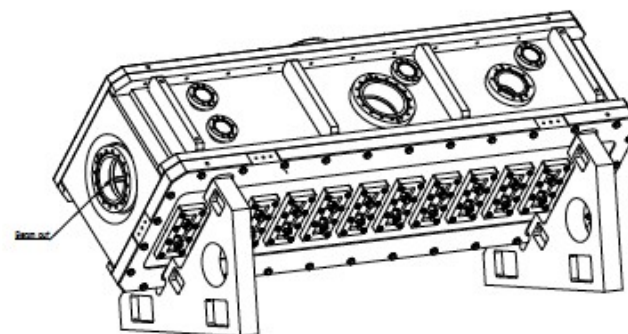
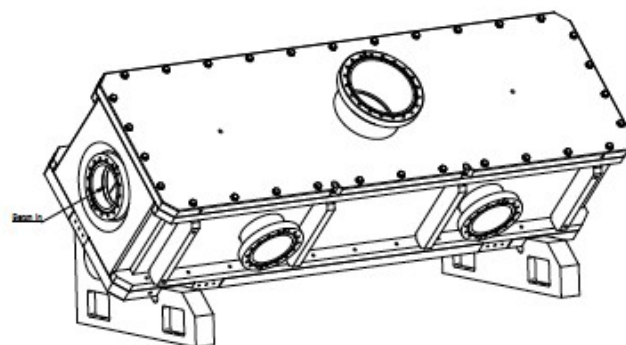
Device	Status	Comments
Solenoid PS	Tests complete?	
LEBT stand	arrived	14 Sep
LEBT beampipe	Complete (22 Aug)	
Correctors		Should be delivered in mid Oct.
Solid state switches	Have PO	Expect to be delivered 1 st week of November
LEBT stand	Nearly done	Slide, stand expected delivery 12 Sept. Small parts may be missing.
Solenoid #4	Potted	Waiting for measurements. Klixons need to be installed

LEBT Stand



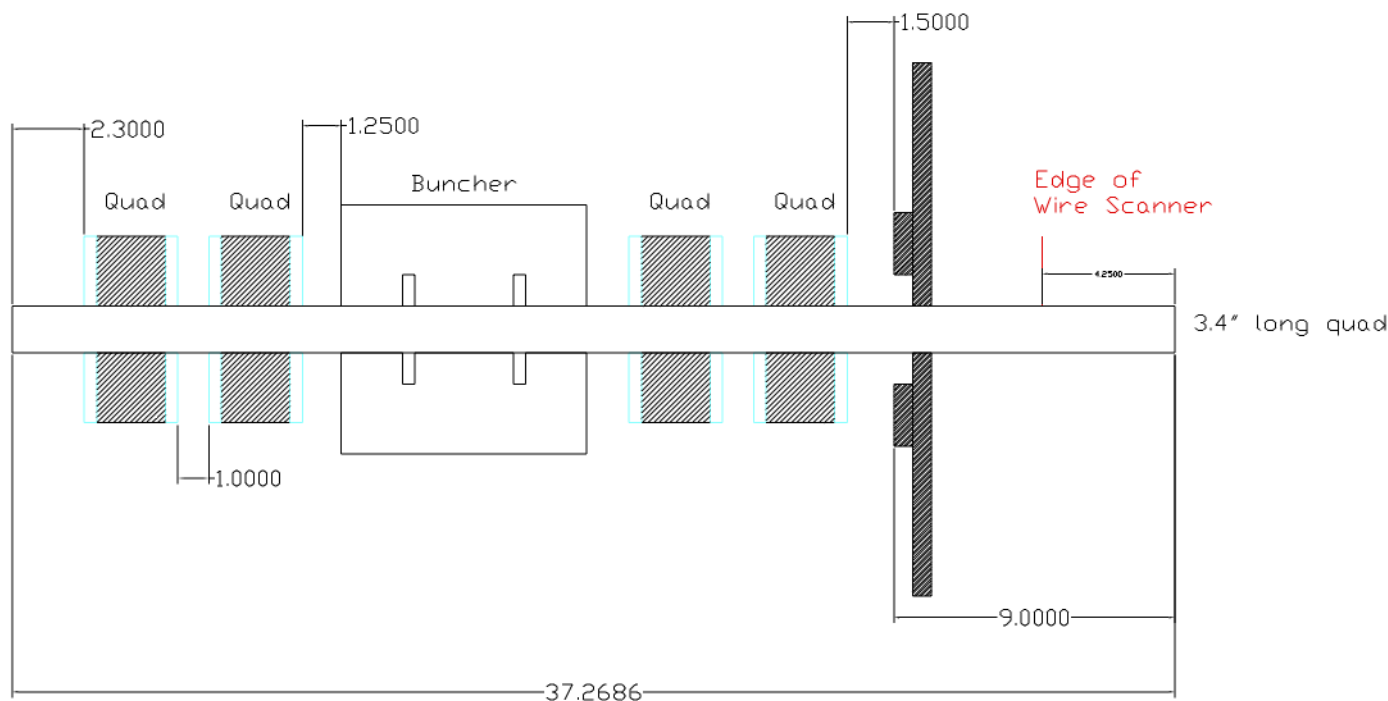
RFQ Status

- Leak checked. 24 Aug 2011.
- Where's Waldo? Where's the TUNER???
 - Shipped from Germany 13 Sep.!!!!

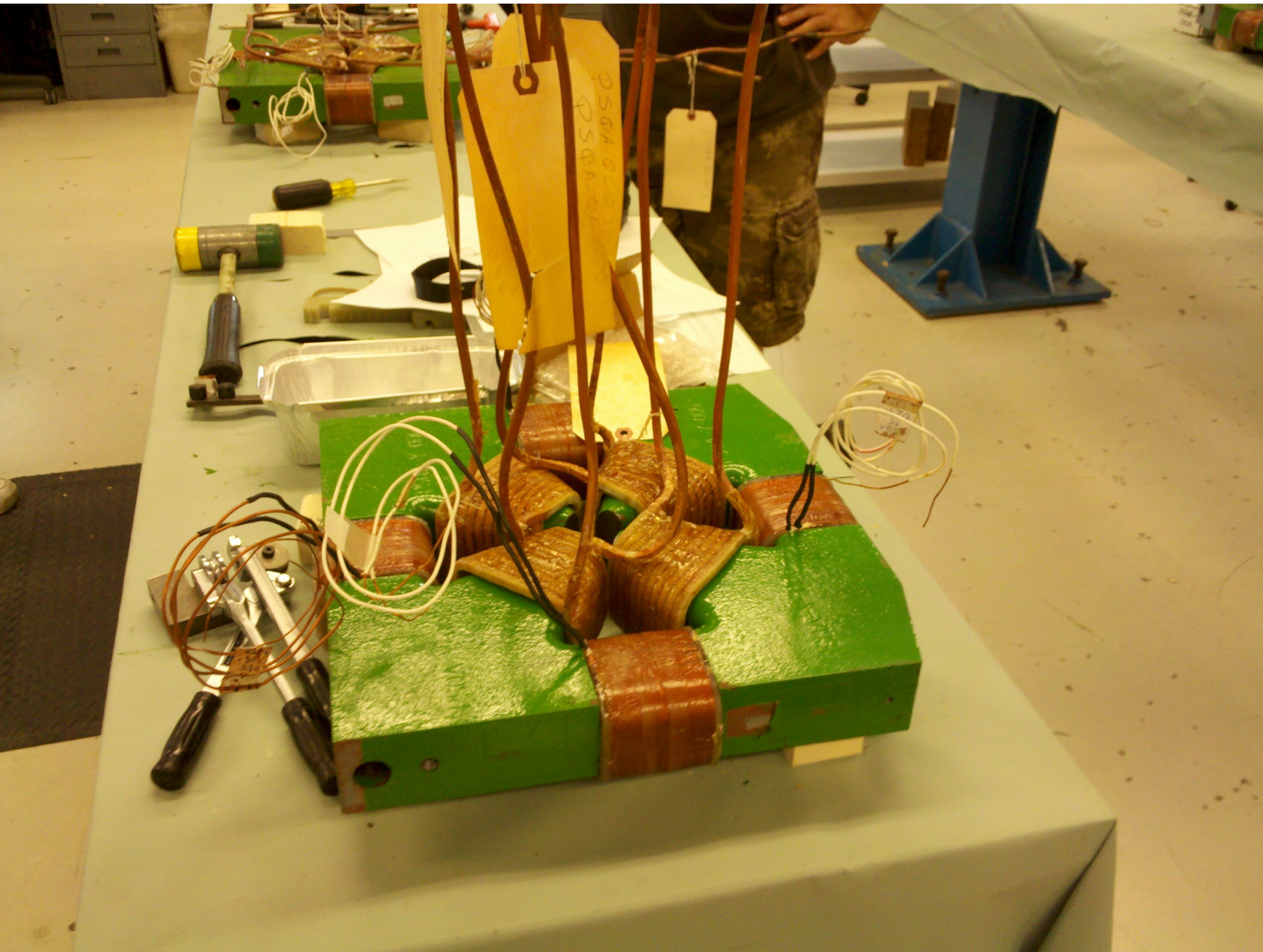


Device	Status	Comments
4816 PA	Cables being pulled	

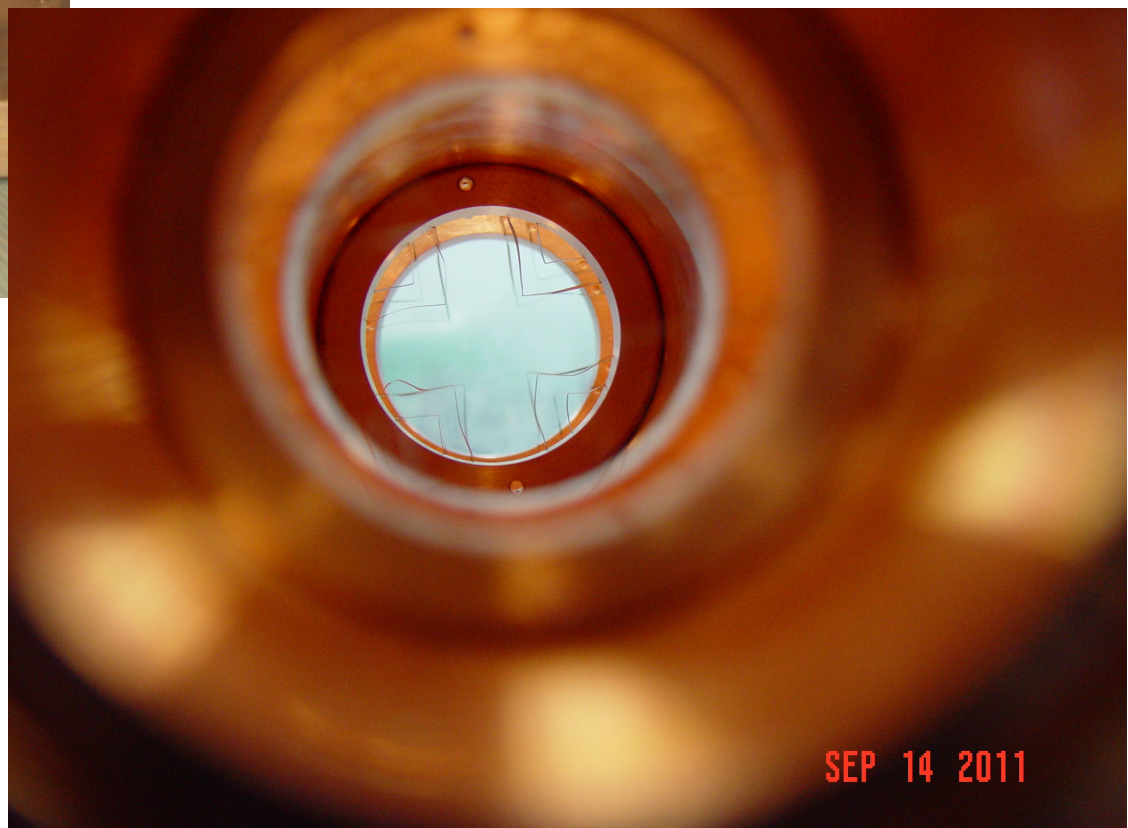
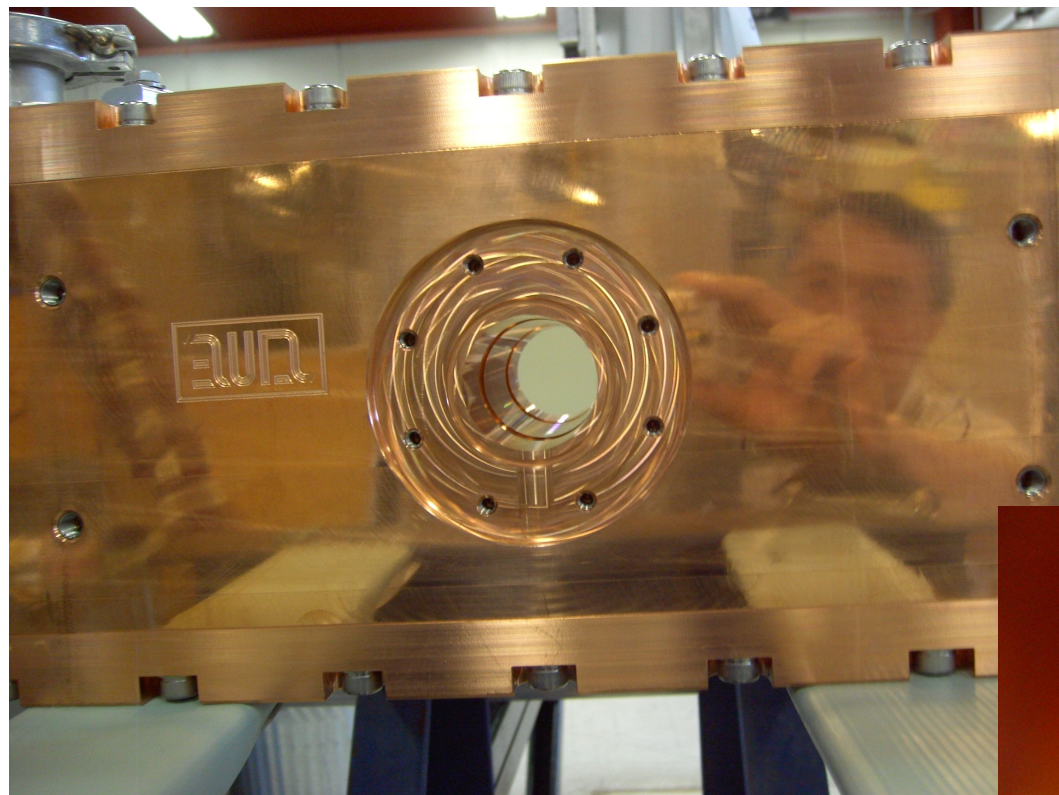
MEBT Status



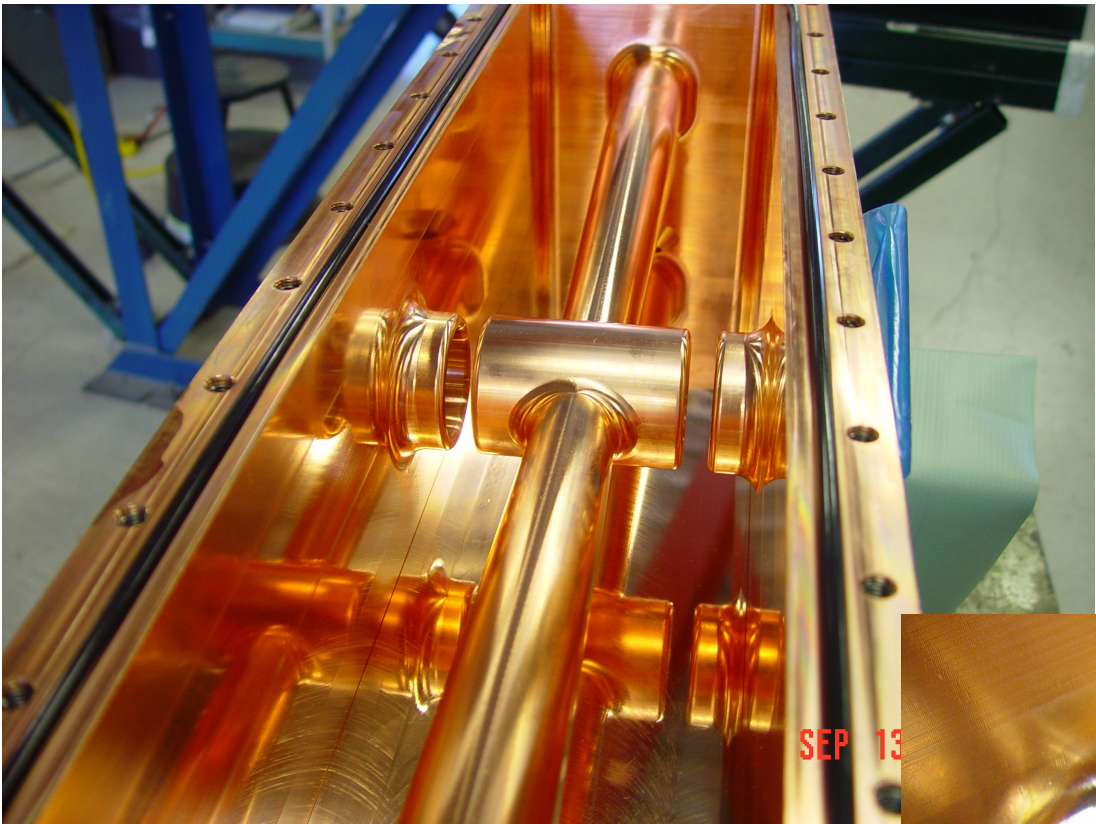
Device	Status	Comments
Quads	Cores delivered. 1 st set of coils test fitted on 1 quad.	Expect 1 st set of doublets end of Sept
Buncher	Measurements started 07 Aug. Should be complete with grids by 21 Sep.	Without grids test complete. Grids are inserted. Tuning block attached.
Power for quads	Specs to follow	Quads being redone.
Power for buncher		Use present buncher supply in the line.



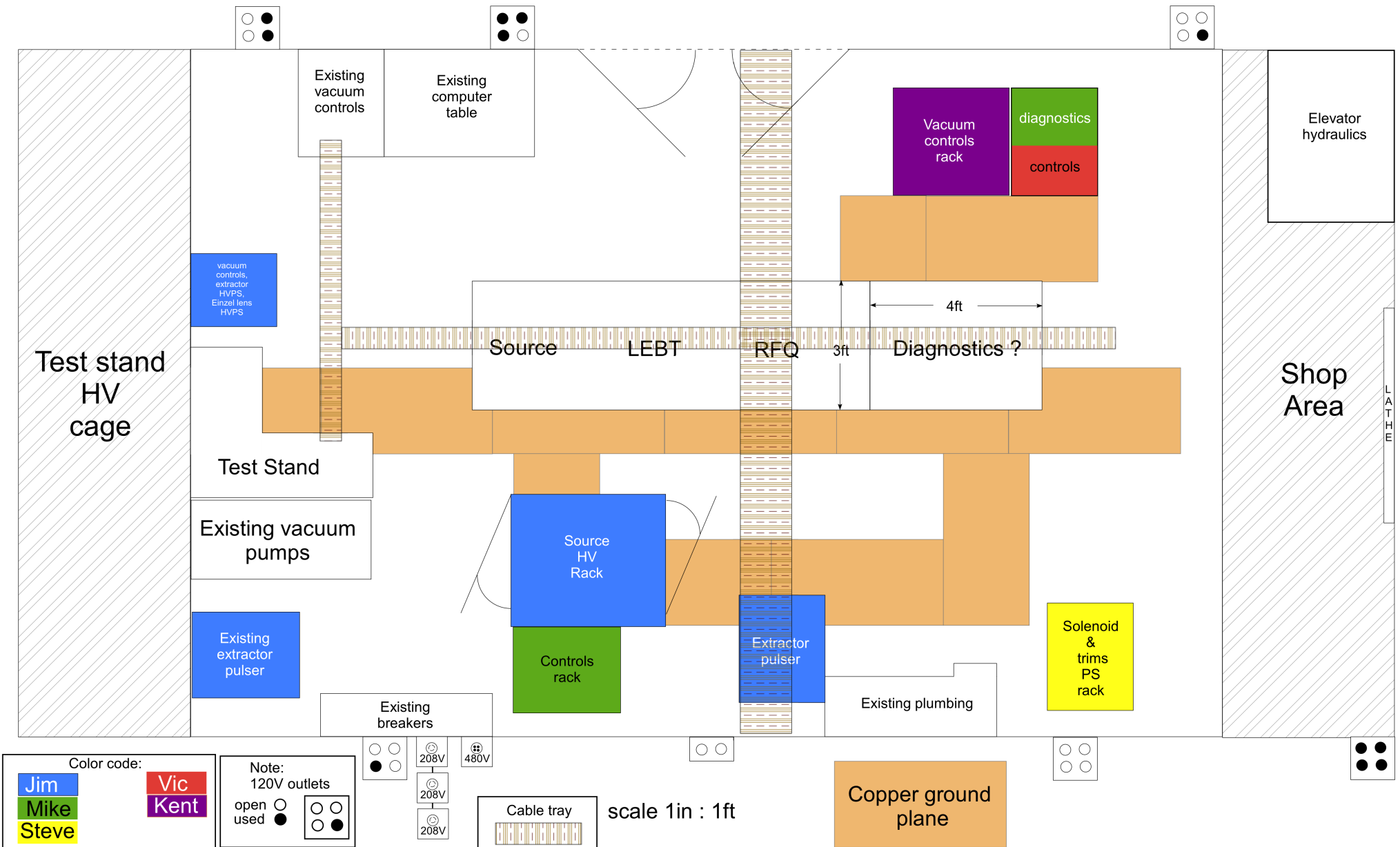
Buncher



SEP 14 2011



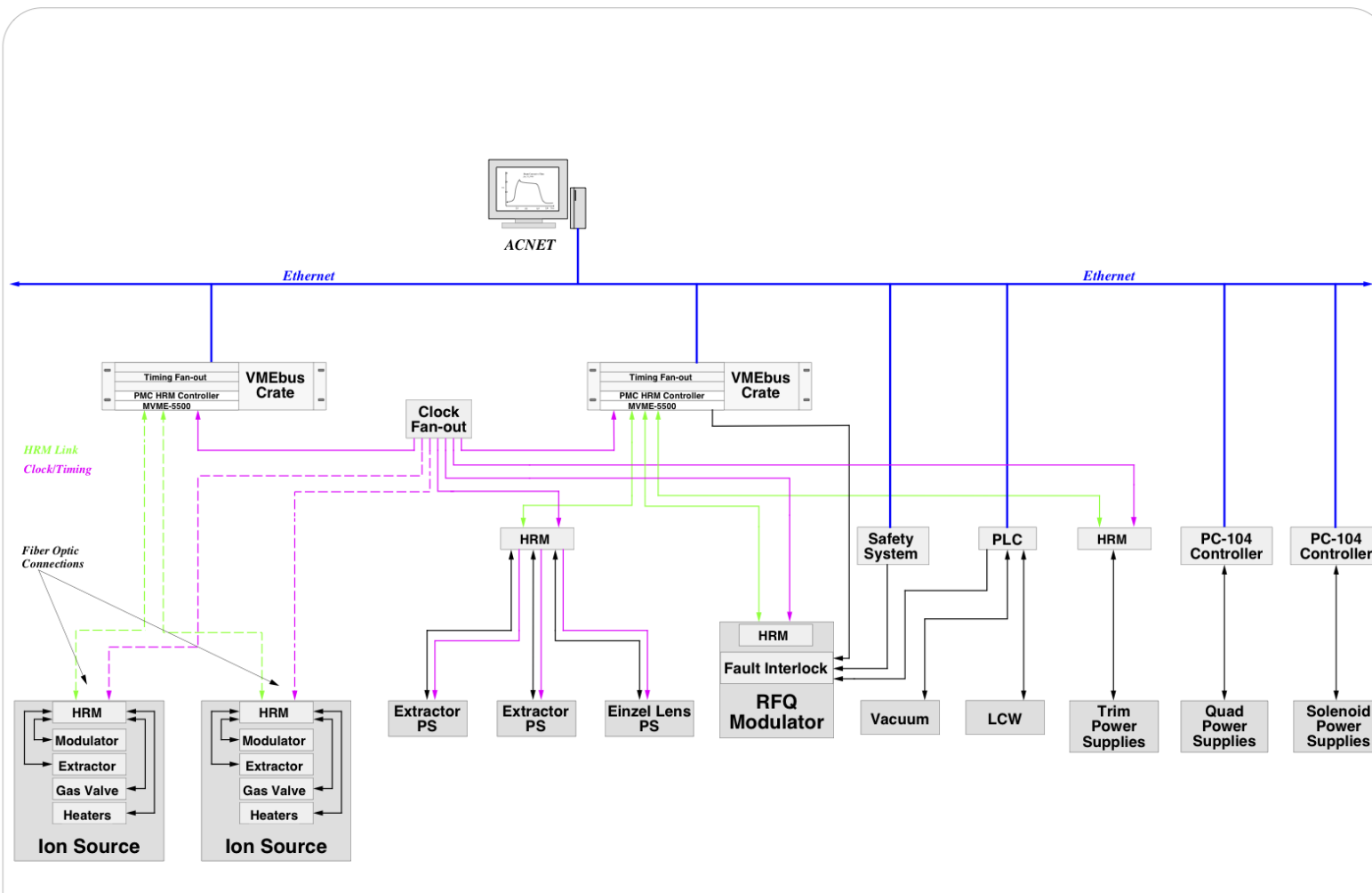
Proposed test area layout



Test area, test stand and instrumentation

Device	Status	Comments
MW can	Complete! (10 Aug)	
MW electronics	Complete! (10 Aug)	
Instrumentation stand	Drawings being checked (24 Aug)	
emittance probes can	Drawings being checked (24 Aug)	
Toroid and dump	Complete! (24 Aug)	
Toroid stand.	Complete! (09 Sep)	
TOF	3 BPM shells	
Faraday Cup	Needs zero length adapter	

Controls



Linac RFQ Upgrade Controls Block Diagram

Safety